

**Universiti Teknologi MARA**

**The Analysis of Mathematics Anxiety's  
Components among Students using  
Fuzzy AHP**

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## **STUDENT'S DECLARATION**

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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## ABSTRACT

Mathematics Anxiety is a negative emotional response to mathematics that can be debilitating. Research indicates that some elements and subjects of mathematics such as long division may trigger unusual rates of distress among high school students of all ages. Some factors that could cause mathematics anxiety are the tension created by learning or test time limits, fear of public humiliation and supervision by educators. If the problem being neglected by the community, it would be worsening the academic platform especially in mathematics course. The implications that would happened is the world will not be able to produce more mathematicians in the next generation. Hence, the main objective of this study is to identify components of mathematics anxiety among Universiti Teknologi Mara (UiTM) Perlis students and the specific objective is to rank the components that contribute to mathematics anxiety among the students from the highest to lowest contributing factor. There are nine components that have been evaluated by the experts in this study which are Mathematics Test Anxiety, Learning Mathematics Anxiety, Social Responsibility Anxiety, Passive Observation Anxiety, Problem Solving Anxiety, Numerical Anxiety, Abstraction Anxiety, Evaluation Anxiety and Course Anxiety. The method used to analyze the data is the Fuzzy Analytical Hierarchy Process (FAHP) through Microsoft Excel. From the study, the result obtained showed that Mathematics Test Anxiety has the largest weight which means it is placed in the highest-ranking with weight of 0.1478 that most probably cause of anxiety among the others and the factor carrying the smallest weight 0.0601 is Passive Observation Anxiety. Thus, it can be concluded that the factor that contributes most to mathematics anxiety among students is Mathematics Test Anxiety.

**Keywords:** Mathematics, Anxiety, Mathematics Anxiety, Fuzzy AHP, Ranking.

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